

BEFORE THE
Federal Communications Commission

WASHINGTON, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

In the Matter of)

Amendment of Parts 21 and 74)
of the Commission's Rules)
With Regard to Filing)
Procedures in the Multipoint)
Distribution Service and in)
the Instructional Television)
Fixed Service)

and)

Implementation of)
Section 309(j) of the)
Communications Act-)
Competitive Bidding)

MM Docket No. 94-131

DOCKET FILE COPY ORIGINAL

PP Docket No. 93-253

To: The Commission

**RESPONSE TO PETITION FOR
RECONSIDERATION AND CLARIFICATION**

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Dated: September 8, 1995

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SUMMARY

SR Telecom Inc. ("SR Telecom") supports the decision of the Federal Communications Commission ("Commission") to permit provision of alternative services, such as wireless loop service, in the Multipoint Distribution Service ("MDS") frequencies. SR Telecom also agrees with the Petition for Reconsideration and Clarification ("Petition") filed on August 16, 1995 by United States Wireless Cable, Inc. ("USWC") to the extent that the Petition requested the Commission to clarify the rule waivers needed to provide alternative services.

SR Telecom urges the Commission to clearly state that wireless loop service may be provided in the MDS frequency band 2500-2690 MHz and to specify which technical rules should be waived for provision of wireless loop service. SR Telecom also supports the Commission's creation of flexible protected service area rules and urges the Commission to ensure that these rules foster the development of alternative uses of MDS spectrum, including wireless loop service.

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To: The Commission

**RESPONSE TO PETITION FOR
RECONSIDERATION AND CLARIFICATION**

Pursuant to Section 1.429(f) of the Commission's Rules and Regulations, SR Telecom Inc. ("SR Telecom") hereby submits its response to the Petition for Reconsideration and Clarification ("Petition") filed on August 16, 1995 by United States Wireless Cable, Inc. ("USWC") in the above-captioned proceeding.^{1/}

^{1/} Public Notice (August 24, 1995).

I. BACKGROUND

A. Wireless Loop Technology Provides a Valuable Service

1. SR Telecom is a Canadian manufacturer of point-to-multipoint radio equipment employed internationally to provide wireless, fixed telephone subscriber service, as well as supervisory control and data acquisition transport for industrial uses. SR Telecom has many systems installed throughout North America, including Canada and Mexico, as well as in Europe, Latin America, Pacific Rim countries, the Middle East, and Africa which provide telephone service to hundreds of thousands of subscribers who would otherwise go unserved. SR Telecom is now working closely with local exchange carriers in the United States with a view toward utilization of its technology to provide wireless loop services primarily in rural and sparsely populated areas.

2. Wireless loop technology provides a spectrum-efficient, valuable source of competition for other forms of voice and data telecommunications. Point-to-multipoint Time Division Multiple Access (TDMA) systems utilize proven technology specifically designed and employed for the purpose of providing wireless service to subscribers who are

frequently located several miles from a central office. Generally speaking, these systems consist of three main hardware elements:

(a) A "Central Station" ("CS") located at and connected to the Central Office ("CO") either at a two wire or NxT1 level, depending on the capabilities of the CO. The CS transmits the continuous TDM signal on one microwave carrier that is received at all appropriate subscriber location areas. The CS can be remotely separated from the CO via an RF channel or either copper or fiber connection in order to overcome frequency congestion or other considerations.

(b) A "Subscriber Outstation" ("OS") which receives the TDM signal from the CS and transmits it back to the CS in burst mode on either demand assigned TDMA or dedicated basis in conjunction with many other OSs in the network. The OS is connected directly to one or many subscribers located in its vicinity. All OSs transmit to the CS on a common frequency, paired with one transmitted from the CS.

(c) A "Repeater Station" ("RS") can receive signals from the CS and OSs, and regenerate and retransmit

them without loss of quality or system capacity. RSs are used to extend the reach of systems to access more remote subscribers and/or to bypass physical obstructions.

3. The microwave carriers are divided in time to provide a number of digital circuits, or trunks, which are accessed on demand by a larger number of subscribers. SR Telecom's system generally incorporates 60 trunks, each a full 64KB/S. A single system can connect nearly 700 subscribers with only a 1% peak-busy-hour-blocking rate. Since these circuits are 64KB/S, subscribers are provided service capable of high speed fax and data without difficulty or limitation compared to alternate technologies. The system also permits the delivery of Basic Access ISDN service [ISDN (2B+D)] or multiple 64KB/S data circuits to any subscriber desiring such service with only a change of the interface card(s). Since these systems are designed to work in difficult environments, they will continue to operate unattended for many years with low power consumption that permits their operation with solar power units where commercial power is unavailable.

4. The delivery of wireless loop services will provide service to many new customers, some of whom have no service currently, at significantly lower costs than that

which can be provided using conventional wire and cable plants. These wireless systems permit the delivery of high quality telephone service with minimum delay. Maintenance is relatively inexpensive and service can be provided rapidly over extended distances.

5. SR Telecom has demonstrated the spectral efficiency of this technology, as compared to point-to-point technology, in various meetings with the Commission over the past twelve months.

II. RESPONSE

B. The Commission Should Clarify its Report and Order and Remove Any Ambiguity Concerning Use of the Band 2500-2690 MHz for Wireless Loop Service

6. In its Report and Order ("Order") in MM Docket No. 94-131 and PP Docket No. 93-253, the Commission specifically provided for alternative uses of MDS frequencies:

The principal use of MDS frequencies is wireless cable service. . . . At the same time, our rules permit use of MDS frequencies for other kinds of services. Section 21.903(b), 47 C.F.R. § 21.903(b) states that 'unless otherwise directed or conditioned in the applicable instrument of authorization, Multipoint Distribution Service

stations may render any kind of communications service consistent with the Commission's rules on a common carrier or on a non-common carrier basis'. We wish to emphasize that nothing in this Report and Order precludes either new licensees or incumbents from using MDS frequencies for other kinds of services pursuant to 47 C.F.R. § 21.903(b). We note, however, that such applicants may need to apply for waivers of certain MDS technical rules, such as 47 C.F.R. §§ 21.903(a) and 21.906.

Order at ¶ 59.

7. In light of the Commission's statement in Paragraph 59 of its Order that it will facilitate introduction of "other kinds of services" in the MDS spectrum, the Commission should permit wireless loop service in the frequency band 2500-2690 MHz. SR Telecom urges the Commission to clarify that MDS spectrum is available for wireless loop service.

8. In addition, the Commission stated in its Order that it will permit "certain technical rules" to be waived so that other kinds of services can be provided in the MDS spectrum. SR Telecom urges the Commission to clarify that it will favorably entertain requests for waiver of those technical rules that would impede the introduction of wireless loop service in this MDS band.

C. Elimination of the Requirement to Maintain Video Transmission Capability

9. One rule which SR Telecom urges the Commission to eliminate now or be open to waiving in the future is the current requirement that an MDS licensee must possess the capability to provide television service; this provision could unnecessarily restrict the introduction of wireless loop service in the MDS band. Specifically, Section 21.907 states that a licensee assigned a 6 MHz channel must be able to provide one type of monochrome and color television service. Section 21.907(d), however, states that a licensee may provide "services other than television" if the authorized bandwidth is not exceeded and the transmitter is type-accepted. Thus, it appears that an MDS licensee must have the capability to provide television service, even though the licensee need not provide such service.

10. In its present form, this rule could force many providers of wireless loop services to lease capacity from MDS licensees rather than obtain their own licenses. In the alternative, wireless loop providers could operate a wireless loop system without providing a video capability if they first obtain a waiver of Section 21.907. However, this option is costly and would delay deployment of wireless loop

service, particularly in areas within the BTA where limited or no MDS service is planned.

11. SR Telecom believes that the Commission need not concern itself with whether the transmission carries video, audio or data; instead the Commission should consider the innovative nature of the service to be provided. SR Telecom points out that wireless loop technology is spectrum-efficient; it is employed in many countries around the world to provide a variety of telecommunications services. The Commission's video transmission requirement would needlessly increase costs to consumers, stifle growth, and limit flexible use of technology, thus restricting those consumers from the advantages of advanced developments in telecommunications.

D. Control Over Receiving Facilities

12. Another technical rule that should be eliminated or clarified is Section 21.903(b); this rule provides that MDS stations may render any kind of communications service

consistent with the Commission's rules on a common carrier or non-common carrier basis, provided that:

- (1) . . . the common carrier controls the operation of all receiving facilities; and
- (2) . . . the common carrier's tariff allows the subscriber the option of owning the receiving equipment.

47 C.F.R. 21.903 (1994); see, Order at ¶ 59.

13. Section 21.903(b) is designed to prevent unauthorized spread of these transmissions by placing control over the descrambling operation of the receiving facilities with the common carrier. In light of the fact that there is no need to protect the public from the content of wireless loop transmissions, this rule should be eliminated as it pertains to wireless loop services and "other kinds of services." Order at ¶ 59.

E. Restrictions Against Interference From Lessees Are Too Rigid

14. Section 21.902(b)(1) provides that each licensee is required to:

(1) not enter into any lease or contract or otherwise take any action that would unreasonably prohibit location of another station's transmitting antenna at any given site.

47 C.F.R. § 21.902(b)(1) (1994).

15. As noted above, wireless loop service is spectrum-efficient. For example, providers of wireless loop services would only need 12 MHz (two 6 MHz duplex channels) in which to operate their entire wireless loop system. The Commission should clearly state that waiver of this rule is available as it pertains to MDS operators and their lessees who offer wireless loop service.

F. Other Technical Rules

16. The Commission stated in its Order that a waiver of other technical rules, including Sections 21.903(a) and

21.906, may be appropriate. Order at ¶ 59.

Section 21.903(a) provides, in relevant part, that:

Multipoint Distribution Service stations are generally intended to provide one-way radio transmission (usually in an omnidirectional pattern) from a stationary transmitter to multiple receiving facilities located at fixed points. . . .

47 C.F.R. § 21.903(a) (1994). SR Telecom agrees with the Commission that a waiver of this rule would be appropriate for wireless loop and similar technologies which utilize two-way radio transmissions in the MDS frequency band.

17. Likewise, SR Telecom agrees with the Commission that waiver of Section 21.906 may be necessary in order to permit provision of other kinds of service in the MDS frequencies. Section 21.906 places specific restrictions on the use of transmitting and receiving antennas. Waiver of these restrictions would be appropriate on a flexible basis in order to meet the needs of individual wireless loop operators.

G. Application of New Protected Service Area Rules

18. The Commission is asked to clarify that wireless loop service providers would be able to lease use of MDS

spectrum and obtain operating rights outright from MDS licensees. The new rules permit license holders to assign or transfer their operational rights in their entire BTAs, or portions thereof, to MDS incumbents or **to other parties**. Order at ¶¶ 3, 24, 160. In its Order, the Commission provided that holders of BTA authorizations and MDS incumbents may negotiate mergers, buyouts, channel swaps, or make other arrangements on a voluntary basis, including buying and selling authorizations to third parties. Order at ¶ 44. Areas within a BTA which are unserved by the MDS operator may be assigned or transferred only if the assignment or transfer occurs within the five-year build-out period established for the operator. Order at ¶¶ 3, 43. Otherwise, those areas could become subject to competing applications. The Commission should ensure that other kinds of services may be permitted use of the MDS spectrum before the five-year build-out period has run its course.

19. Likewise, the Commission should ensure that the new service area rules provide flexibility for wireless loop service providers as well as MDS providers. The Commission will permit MDS licensees to partition their service areas. Order at ¶ 47. Partitioning should enable wireless loop service providers to serve distinct areas of an MDS licensee's service area, rather than the entire service

area. The Commission should ensure that these service area rules, which expand MDS coverage to areas currently unserved by MDS licensees, will permit wireless loop service providers access to markets which would otherwise remain unavailable.

III. CONCLUSION

20. TDMA wireless loop technology provides a spectrum-efficient, valuable complement to other forms of voice and data telecommunications. SR Telecom urges the Commission to encourage the development of wireless loop systems nationwide by expressing its unambiguous support for provision of wireless loop service in the MDS spectrum. SR Telecom submits that the Commission should eliminate those "technical rules" which are inconsistent with the provision of wireless loop service. Alternatively, those rules should be clarified to the extent possible to eliminate any unnecessary requests for rule waivers. The Commission should also clarify Paragraph 59 of its Order concerning provision of "other kinds of services" to remove any doubt regarding the provision of wireless loop service.

21. SR Telecom welcomes the Commission's acknowledgement that MDS frequencies are available for

alternative uses and its emphasis that nothing in its Order precludes either incumbents or new licensees from using MDS frequencies to provide other kinds of service, such as wireless loop service. SR Telecom supports the flexible protected service area rules and urges the Commission to ensure that they permit development of alternative uses of MDS spectrum.

WHEREFORE, THE PREMISES CONSIDERED, SR Telecom Inc. respectfully requests that the Commission clarify its Order in this matter in accordance with the views expressed herein.

Respectfully submitted,

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Dated: September 8, 1995

CERTIFICATE OF SERVICE

I, Patt Meyer, a secretary in the law firm of Keller and Heckman, do hereby certify that a copy of the foregoing RESPONSE TO PETITION FOR RECONSIDERATION AND CLARIFICATION has been served this 8TH day of September, 1995, by mailing U.S. first class, postage prepaid, to the following:

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